

Residual oil saturation to gas sweep (sorg)

A value of oil saturation $k_{rog}(s_o < s_{rog})$ below which oil is not getting swept by gas:

$$(1) \quad k_{rog}(s_o < s_{rog}) = 0$$

It usually depends on [absolute permeability](#) k_a as:

$$(2) \quad s_{org} = s_{org,0} \cdot \left(1 + k_a/k_{a,sorg}\right)^{-n_{sorg}}$$

See also

[Physics](#) / [Fluid Dynamics](#) / [Percolation](#)

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Field Study & Modelling](#)

[[Petrophysics](#)] [[Basic reservoir properties](#)] [[Wettability](#)] [[Permeability](#)] [[Absolute permeability](#)] [[Relative permeability](#)] [[Oil permeability](#)] [[Oil relative permeability](#)] [[Oil-gas relative permeability \(krog\)](#)]